Job Description

Missouri State Highway Patrol

Class Title: Criminalist I - DNA (Convicted Offenders)

<u>Title Code: V00517</u> Effective Date: 04/24/96

Date Reviewed:

Date Revised: 10/24/05

Immediate Supervisor: Criminalist Supervisor

<u>Position Supervised</u>: None <u>FLSA Classification:</u> Non-exempt

**Working Hours**: An employee in this position works an eight-hour shift as directed by the division director; however, working hours are subject to change at the discretion of the

commanding authority.

### **POSITION SUMMARY**

This is an entry-level position where the employee performs technical work in the scientific analysis of biological samples for DNA profiling of convicted offenders under Missouri statutes using current DNA techniques. An employee in this position participates in a formal and on-the-job training program. Work is performed under immediate supervision.

### **DESCRIPTION OF DUTIES PERFORMED**

(Any one position may not include all of the duties listed nor do the listed examples include all tasks, which may be found in positions of this class.)

Under close supervision an employee:

Regularly analyzes biological samples from convicted offenders and sexually violent predators and applies proper methods of purification, amplification, capillary electrophoresis, and data analysis for DNA profiling.

Confers with supervisor reference DNA analysis.

Performs analysis using DNA STR technology; interprets DNA results via software analysis; enters data into the Combined DNA Index System (CODIS).

Regularly works with a variety of potentially hazardous materials (e.g., HIV, hepatitis, and/or unknown pathogen contaminated biological evidence).

Participates in formal and on-the-job training in the collection and analysis of biological samples for DNA profiling.

Prepares evidence and exhibits; may appear in court as an expert witness; maintains report files; issues periodic and special reports as assigned.

Generates and receives requests to and from other criminal laboratories, law enforcement agencies, prosecutors, attorneys, etc., reference DNA profiling and crime laboratory procedures.

Studies standard operating procedures, training, quality control, and safety manuals, etc., within the chosen/related discipline.

Operates standard office equipment (e.g., personal computer, telephone, fax machine, copier, calculator, etc.).

Participates and successfully passes practical competency and/or written test(s) prior to assuming DNA profiling duties.

Assist with training of law enforcement and Department of Corrections employees regarding the DNA Profiling system.

Learns about and participates in the proficiency testing program for the laboratory.

Performs job-related travel, as needed.

Performs other related duties as assigned.

## REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

Ability to participate in a formal and on-the-job training program.

Ability to read English effectively.

Ability to communicate in English clearly and concisely, both orally and in writing.

Ability to explain technical procedures and scientific processes.

Ability to learn the procedures and methods used in DNA analysis.

Ability to confer with supervisor and be guided in the decision-making process.

Ability to work with potentially hazardous materials as detailed in the description of duties.

Ability to learn and practice safety rules and procedures associated with laboratory equipment and chemicals.

Ability to generate and receive requests for information from a variety of individuals reference DNA analysis.

Ability to learn about the compilation and preparation of evidence for presentation in court and the role of an expert witness in legal proceedings.

Ability to perform work in accordance with prescribed procedures, make accurate observations of test results, and prepare accurate records and reports.

Ability to gather, assemble, correlate, and analyze facts to be incorporated into a report of laboratory work and tests.

Ability to maintain composure while under cross-examination in regard to personal and scientific qualifications and defend laboratory findings in court.

Ability to work with restricted, highly sensitive information in a confidential and professional manner.

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Ability to compile and prepare information for court presentation.

Ability to recognize and identify minute details.

Ability to establish and maintain effective working relations with others.

Ability to properly use or learn how to use laboratory equipment, photography equipment, and standard office equipment.

Ability to prepare reagents and standards as prescribed in the appropriate procedure and quality manuals.

Ability to perform job-related travel (e.g., appearing in court and attending training meetings, seminars, etc.).

Ability to distinguish colors necessary to perform laboratory tests.

Ability to stand for extended periods and lift moderate loads (30 pounds).

Ability to participate in and successfully pass practical and/or written competency test(s) prior to assuming DNA profiling duties.

Ability to study manuals.

Ability to work with material that may be of a sexual nature relating to criminal activity (e.g., written material, photographs, and/or verbal language, etc.).

Ability to work hours as assigned.

Ability to safely operate a motor vehicle.

### MINIMUM EXPERIENCE, EDUCATION, AND TRAINING REQUIRED

(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.)

Possess a baccalaureate degree in one of the natural sciences or a closely related field; coursework must include 20 semester hours in biology to include college coursework covering the subject areas of genetics, biochemistry, molecular biology (molecular genetics, recombinant DNA technology). Coursework and/or training in statistics and population genetics as it applies to forensic DNA analysis are recommended. These courses must comply with the FBI's Quality Assurance Standards for Convicted Offender DNA Databasing Laboratories and ASCLD/LAB's accreditation criteria. A minimum acceptable grade of C or equivalent in these core biology courses and the core baccalaureate major courses is required. Core courses with grades less than a C must be resolved by retaking the course and achieving a grade of at least a C. Prior job experience will not replace these minimum academic requirements.

## NECECCARY SPECIAL REQUIREMENTS

Must be a resident of Missouri at the time of appointment.

Must possess a valid Missouri drivers' license at the time of appointment.

Must provide a DNA sample to be used only for forensic identification as required at the time of

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appointment.

Must be able to pass a polygraph examination after conditional offer of employment.